

JEEVANKUR TALUKDAR

education

B. Tech, Indian Institute of Technology
Kharagpur, West Bengal
2017 - 2021

links

mail - jeevankur.iit@gmail.com
github : jvankooo
website : jvank.me

tools

C, C++, C#, Python, JavaScript
OpenCV, Unity, TensorFlow
ROS, MATLAB, Fusion360, Blender

PROJECTS AND EXPERIENCE

- [7] **Nexus Pi Robot** | Autonomous Ground Navigation Robot Ongoing
An autonomous robot for ground navigation using single monocular vision camera made over Raspberry Pi 4. Traceable path search, detection and tracking with OpenCV.
Research-field : [Robotics](#), [AI](#), [Navigation](#) | [Computer Vision - OpenCV](#), [Path Planning](#), [Raspberry Pi](#)
- [6] **S.M.A.R.T** | Robotic Controls System [\[Code \]](#) Nov, 2019
Simulation, Monitoring and Augmented Robot Training. Development of a system for simulating and deploying programs for targeted remote robotic devices through an augmented virtual environment over the cloud.
Research-field : [Robotics](#), [Human Robot Interaction HRI](#) | [AR](#), [Serial Communication](#), [Sockets](#), [Vuforia](#)
- [5] **CodAR** | Research Publication - Poster [\[PDF \]](#) ICCE 2019, Kenting, Taiwan
Sharma, V., Talukdar, J., Bhagat, K.K. (**ICCE 2019**) CodAR : An augmented reality based game to teach programming. (Shih, J. L. et al. (Eds.) (2019). Proceedings of the 27th International Conference on Computers in Education.Taiwan: Asia-Pacific Society for Computers in Education.)
Research-field : [Computers in Education](#) | [AR / VR](#)
- [4] **ConnectAll** | Hack-A-Bit National Hackathon [\[Code \]](#) Oct, 2019
Development of a software stack to enable communication across physical disabilities by converting any form of input to all other forms of communication output. For example speech to text, sign language etc.
[Javascript](#), [OpenCV](#), [Azure Vision api](#), [Python Flask](#), [Full Stack](#)
- [3] **MedAI** | Phillips India National Hackathon [\[Code \]](#) Sep, 2019
Development of an application to predict diseases by asking questions like a doctor would, using MedaCy NER model. Alongside it can read and organise handwritten medical prescriptions.
[Keras](#), [OpenCV](#), [Azure Vision api](#), [MedaCy](#), [Python Flask](#), [Full Stack](#)
- [2] **Pixelation Maze Solver** | Nationl Students Space Challenge 2018 [\[github \]](#) Oct, 2018
An autonomous robot to traverse through a maze by path planning (dijkstra in C++) while communicating with an overhead camera.
[Image processing](#)- [OpenCV](#), [Path planning](#), [serial communication](#)
- [1] **Audio Visualizer Game** | Microsoft Hackathon [\[link \]](#) Feb - March, 2018
Development of an audio visualizer game under 3 days with Unity 3D for the Microsoft code.fun.do hackathon and securing 2nd position in the online round while qualifying for the finals.
[C#](#), [Unity 3D Game Engine](#), [Blender](#)
- [0] **Agricultural snake robot** | Under MHRD [\[video \]](#) Oct-Nov, 2017
Design of an autonomous snake robot for traversal through rough agricultural fields to assist in agricultural activities.
[Fusion360](#), [Lua Script](#), [Vrep](#), [3D printing](#)

PREVIOUS INTERSHIPS

- [1] **RCSL Taiwan - Winter Internship** | Robot Based Learning System [\[PDF \]](#) Mentor: [Dr. Nian-Shing Chen](#) | Dec, 2019
Improvement, Development and Evaluation of a robot based multi-modal learning system at the Research Centre for Smart Learning, YunTech, Taiwan.
Research-field : [Robotics](#), [Robot Based Learning](#) | [IOT](#), [Android](#)
- [0] **ClassHero (H. Labs USA) - Summer Internship** | Software Development [\[PDF \]](#) Mentor: [Dr. Golam Ashraf](#) | May-July, 2019
Development of a system for dynamic and consistent math puzzle generation (using nodejs , express, mathjs) along with a web application to design and craft stories for the puzzles (using Bootstrap, jquery, visjs).
Research-field : [Intelligent Games](#) | [Full Stack](#)

RESPONSIBILITIES

Head | CGL - Computer Graphics Lab , IIT Kharagpur

Sep 2019 - Present

The computer graphics student's group of IIT Kharagpur. Involved in several projects including Computer Graphics, Vision and Robotics. Managed events, workshops and projects. Mentored over 200 students in the field.

Member | TRS - Technology Robotix Society , IIT Kharagpur

July 2017 - July 2018

Worked on several robots and technical projects, conducted events, competitions and workshops for students from various colleges all over India. As a team we also successfully organised the annual Robotix fest which is the major event of the society.

Mentor| KWOC - Kharagpur Winter of Code , IIT Kharagpur

Dec 2019

Closely mentored students into open source software development on the MedAI project. Testing changes and helping students solve the assigned tasks.

Co-founder / Developer | PlayLogical Studios

Feb 2019 - Present

Successfully launched several applications on various platforms reaching over 500+ downloads in the first 3 days. Helping students build, publish and market their software ideas.

Student Ambassador | Unity Technologies

April 2018 - Present

Mentored hundreds of students in game development using Unity3D Game Engine and C# conducting few events and collaborative sessions for game development.

Co-founder | CodeStash , IIT Kharagpur

Oct 2017 - Present

CodeStash is a society to help students with computer programming and introduce them to the coding and development culture. Over the past year we have reached to more than thousands of students and have conducted several events and activities to boost up the coding culture.

Head | Science Club

April 2014 - March 2015

I conducted various activities involving science fairs, technical project sessions and lead a team from the school to represent the state in national round of Iken Scientifica.

RELEVANT COURSEWORK

Programming and data structures (CS1001 + CS19101)

Multi Objective Optimization Programming (MA61046)

Engineering Design and Graphics (CE13001)

IEEE Image Processing (Workshop) + Stanford University (MOOC)

Linear Algebra - MIT (MOOC)

Machine Learning - Coursera, Stanford University (MOOC)

Algorithms - Coursera, Stanford University (MOOC)

AWARDS AND ACHIEVEMENTS

Fortress - (Shape Detection Robot) - **4th**

Pixelation - (Maze solver robot) - **3rd**

Swiggy - (App design) - **2nd**

Microsoft Code.fun.do (software hackathon) - **Finals**

DROP (Open IIT product design) - **3rd**

GC Open-Soft (Open Source development) - **3rd**

Robo-Soccer (Soccer playing manual robot) - **1st**